# **Case Study**



"We've put something together here that is far more powerful than simply an integrated system. It has connected our community."

#### **Rod Hughbanks**

Director of Information Systems

## Client at a Glance

Location: Winona, Minn.

**Beds:** 99

#### **Cerner solutions:**

Electronic medical record, transcription management, registration, scheduling, enterprise master person index, PACS, radiology, personal health record, emergency, pharmacy, laboratory, HIM

# **Connected community enables better care**

# Winona Health

The residents of Winona, Minn., live in a connected community—with an electronic personal health record (PHR) available to all. This approach to healthcare information technology (HIT) enables Winona's 26,537 residents to coordinate care with doctors, nurses and other providers.

Clinicians use a full suite of HIT solutions, built on the unified *Cerner Millennium®* architecture, to provide safer patient care. With ready access to health data, patients and providers communicate more effectively and efficiently.

The Winona Health Online PHR supports about 100 active users; two dozen of these live with diabetes. Winona's Diabetes Center connects trained educators to patients who provide personal health information weekly, enabling significant positive health changes, including the closer monitoring of glucose levels.

"We need to get a handle on this," said Janice Turek, R.N., Winona Health Online coordinator. "E-health condition centers are how we can do that. The beauty is that patients can do it at their convenience."

Today, Cerner solutions automate transcription, registration, scheduling, radiology and clinical orders, as well as emergency, pharmacy, laboratory and other clinical services, explained Rod Hughbanks, director of information systems.

"When you connect the community, you benefit greatly from the non-duplication of services, and by better communication of clinical information," Hughbanks said.

### Vision for quality care

When Winona began its project, local physicians and independent clinics enthusiastically supported an even broader effort to automate healthcare, leading to automation of pharmacy, lab, radiology and affiliated physician practices.

"It was a universal vision by physicians and the hospital to have all information about our patients



in the same database, so it could be accessible wherever the patient may be, and so it could move with the patient through the health system," said Mike Allen, chief financial officer.

Winona implemented the *PowerChart® Office* electronic medical record (EMR) in February 2002 at two clinics. Community Memorial Hospital went live in March 2003 with 16 applications, including the *PowerChart®* acute care EMR.

Winona's HIT plans include computerized physician order entry (CPOE) and closed-loop medication management.

"All of this moves us closer to our goal of saving patients' lives and improving the quality of care we provide," Allen said.

## Delivering care, receiving benefits

Dr. Bill Davis, chief medical information officer and a partner in Family Medicine of Winona, P.A., has used an EMR for many years. First-generation systems, however, merely allowed physicians to view data; the EMR was not interactive, and physicians couldn't enter information. Now, Davis and his colleagues track patient data and generate prescriptions in the exam room, triggering pharmacy orders.

"Sharing data with physicians has really been key," Hughbanks explained. "Getting all the physicians



together was great, and we couldn't have done that without Cerner's help."

Specifically, Cerner enabled customized security settings, while maintaining controlled access to patient data.

"The biggest benefit is immediate access to the record any place, any time," Davis said. "I have patients calling me at home and I look at their record; it's right there. It's hard to beat that. And electronic prescribing is a huge advantage. All their meds are there, the interactions are documented, and it avoids errors."

The EMR has improved patient safety, integrated clinical and financial processes, and streamlined work processes.

"With the link into our billing, in the first year after go-live, we increased our billings by \$500,000 by more accurately coding visits," Davis said.

Additionally, Davis developed pre-completed notes that enable him to document patient visits in real

"By the end of the day I usually have all of my notes done," he said. "I don't do any dictation."

For Davis, the benefits of HIT solutions are clear: "You can get this information any time, anywhere. Anybody who's lived in a world of paper charts and waited hours or days for information knows this is beneficial."

# Managing change, increasing efficiency

Cerner supports Winona's information systems through its Remote Hosting Option. The health system's hardware is hosted at Cerner's data center in Lee's Summit, Mo.

"Having a system with this much power would be difficult to maintain in a rural area with a limited IT staff," Hughbanks explained. "It would be impossible for Winona Health to match the data center facility that Cerner provides to host our system. It has redundancy in servers, network infrastructure, battery backup and two separate electrical utilities feeding power to the building. The center is as disaster proof as I've seen. including a 'building within a building' to protect the contents. I couldn't feel better about our data security and safety."

While Hughbanks and his information services staff maintain front-end functions-PC troubleshooting, end-user hardware training and support—Cerner's data center provides 24 x 7 back-end support.

"We've had minimal downtime and we've had excellent support," he said.

When it came to implementation, Winona followed Cerner's structured, recommended-practice approach, which leverages best practices and cumulative learning to increase speed to value.

"The approach allowed us to put a dedicated team together to create and develop more than 15 applications at the same time, which was a challenge," Hughbanks said. "But we developed a very solid team with tremendous synergy. Whether there were problems or successes, we were all in it together."

#### Foundation for the future

Nearly all hospital services, including pharmacy, laboratory, radiology, registration, emergency department and health information management (HIM), support care quality improvements. For example, Winona's HIM department improved its ability to accurately track charts. The EMR system enables seamless certification of insurance information and direct access to patient information. It helped to eliminate many phone calls and reduce the number of incomplete charts.

"Health information management has seen the quickest return on their investment from the new system," Allen said. "Their turnaround time on charting is much better. Their compliance by physicians in signing charts has improved. They've been able to reap benefits pretty quickly."

In addition, Winona's pharmacy has streamlined operations, applying the EMR system to eliminate many procedural steps. Winona uses the system to process an average of 30,000 inpatient medication orders and 65,000 orders from affiliated clinics each month.

"I like how Cerner works with me through solutions to processes," said Grant Schuth, pharmacy director.

Winona Health chose Cerner as its HIT partner for its extensive solution suite across disciplines. Complete integration and the ability to rapidly deploy solutions also appealed to Winona.

"The number-one benefit is yet to come." Allen said. "That will be implementing meds integration and computerized physician order entry. That's where all the safety issues can really be fleshed out-when we take the human element out of the equation and automate everything that can be automated. All the efficiencies and all the quality and safety issues are right there."



**Key Benefits** 

Increased charges by

documentation and

Reduced one FTE in the

exam volume by 25-30

percent without adding

Eliminated lost studies

(12-20 lost annually

prior to Cerner PACS)

coding accuracy

business office

Increased radiology

**FTEs** 

40 percent by improving